

REMARKS

Claim 1 has been amended, claims 4 to 18 have been canceled and claim 19 has been added.

Claims 1 to 4 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (U.S. 6,248,637). The rejection is respectfully traversed.

Claim 1 now contains subject matter from prior claim 4 and requires that the anneal period be from about 0.5 milliseconds to about 3 milliseconds. No such anneal period is taught or suggested by Yu. The Examiner alleges that the use of RTA (rapid thermal anneals) is a showing of the specific time window claimed. Clearly, this is not the case. To begin with, nothing in the record shows that RTA takes place in the time window claimed. Furthermore, even were it to be shown that RTA encompasses the window claimed, this would not be sufficient to provide a teaching of the specific window claimed. The annealing time period claimed, in combination with the temperature range as claimed provides for formation of ultra shallow junctions in semiconductor devices. In Yu, as clearly stated at column 6, lines 4ff “[a]fter the dopant implant , a high temperature rapid thermal anneal (RTA)(1050-1100°) is utilized to activate dopants in conductor 36 and regions 22 and 24 to ensure low contact series resistance and reduced gate depletion effect” (underline not I original). It should be noted that the purpose of the high temperature RTA anneal is not stated to be for production of ultra shallow junctions. It follows that there is no teaching or suggestion that the RTA would be limited to the window claimed herein as required by claim 1 or to the temperature range as required by claim 1 or to the combination which in fact provides the type of junction sought.

Claims 2, 3 and 19 depend from claim 1 and therefore define patentably over Yu for at least the reasons presented above with reference to claim 1.

With reference to claim 19, the range as claimed is not found in Yu and relates to the embodiment disclosed on page 11, lines 8ff.

In view of the above remarks, favorable reconsideration and allowance are respectfully requested.

Respectfully submitted,



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